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Treatment

Genetic variations in the serotonergic system may predict response to cognitive-behavioral therapy for PTSD

Genetic factors explain roughly 30% of the variance in the development of PTSD. Several specific genetic factors have been implicated, including a polymorphism of the serotonin transporter gene *SLC6A4*. Investigators from Australia recently reported that PTSD patients with a specific type of polymorphism had poorer response to CBT. According to the authors, this is the first study to show that genetic factors affect response to CBT for any disorder. There are two variations in the region of *SLC6A4* that promote the release and uptake of serotonin, a short allele and a long allele. The short allele has been linked to increased risk of PTSD in the presence of low social support. Individuals with PTSD who have this polymorphism also show heightened reactivity in the amygdala (a region of the brain involved in processing fear) when exposed to fearful stimuli. Forty-five men and women with PTSD participated in the study, 31 who had at least one copy of the short allele and 14 who had two long alleles. Treatment consisted of 8 weekly 90-minute sessions of CBT, including exposure and cognitive restructuring. Although the short and long allele groups did not differ according to analyses that examined PTSD at pretreatment, posttreatment, and 6-month follow-up, specific comparisons showed that the short allele group had greater symptom severity at follow-up and was more likely than the long allele group to still have PTSD (48% vs. 15%). These findings now

need to be replicated in a larger sample. The clinical implications are potentially significant if genetic information can provide patients and clinicians with information that will help to optimize treatment for individuals.

Read the article...<http://dx.doi.org/10.1016/j.biopsych.2010.03.016>

Bryant, R. A., Felmingham, K. L., Falconer, E. M., Pe Benito, L., Dobson-Stone, C., Pierce, K. D., & Schofield, P. R. (2010). Preliminary evidence of the short allele of the serotonin transporter gene predicting poor response to cognitive behavior therapy in posttraumatic stress disorder. *Biological Psychiatry*, 67, 1217-1219. PILOTS ID: 34285.

Safety of exposure therapy for PTSD patients with cardiovascular illness

Providers may not deliver exposure therapy for PTSD to patients with cardiovascular problems because of safety concerns related to the arousal engendered by exposure. However, recent findings from a Mt. Sinai Medical Center study suggest no differences in adverse outcomes between cardiovascular patients with PTSD who received exposure therapy and those who received education only. Sixty patients with PTSD related to a cardiovascular event completed either 3 to 5 sessions of imaginal exposure or 1 to 3 sessions of education regarding adherence to their medical regime. Patients tolerated the exposure well. Blood pressure and pulse ratings taken before and after sessions, as well as mortality and hospitalizations (which were rare), did not differ between groups statistically or in a clinically meaningful way. These findings suggest that exposure therapy can be delivered safely even to patients who

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have PTSD due to a serious cardiovascular event such as a myocardial infarction. Of course, null findings should always be interpreted cautiously, especially when based on a small sample. Another factor indicating a need for caution is that patients who received exposure showed more improvement than those who received education on only one of the four secondary psychiatric outcomes. The lack of clinical benefit in the exposure group may indicate that these patients did not receive enough exposure to cause safety problems.

Read the article...<http://dx.doi.org/10.4088/JCP.09m05116blu>

Shemesh, E., Annunziato, R. A., Weatherley, B. D., Cotter, G., Feaganes, J. R., Santra, M., Yehuda, R., & Rubinstein, D. (2010). A randomized controlled trial of the safety and promise of cognitive-behavioral therapy using imaginal exposure in patients with posttraumatic stress disorder resulting from cardiovascular illness. *Journal of Clinical Psychiatry*. Published online ahead of print, Apr. 6. PILOTS ID: 34244.

Schema-focused therapy as a possible adjunct to PTSD treatment

Schemas about self and the world exert a strong influence on cognitions and affect. Changing maladaptive schemas therefore may be a useful target in PTSD treatment. A recent study explored this possibility by comparing outcomes in Veterans treated in one of two outpatient PTSD programs: traditional cognitive behavioral therapy (CBT) ($n = 54$) and a similar CBT treatment that included schema-focused components ($n = 127$). Although PTSD, depression, and anxiety decreased in both groups, decreases in PTSD and anxiety were greater in the schema-focused group. Analyses within the schema-focused group showed that schema change accounted for about one-quarter of the decrease in PTSD symptoms. These findings suggest that it may be helpful to add a focus on schemas to CBT. However, because patients were not randomized to treatment there were other differences between the groups that make it difficult to interpret the findings. The two interventions differed in some educational components, and in the trauma types targeted by exposure therapy. The CBT data were collected between 1996 and 2002, whereas the schema-focused data were collected between 2007 and 2008. Also, Veterans in the CBT group were Vietnam era and Veterans in the schema-focused group were from various eras and received more treatment overall. The better outcomes in the schema-focused group could be due to improved staff skills in more recent years and the more chronic nature of PTSD in the Vietnam Veterans who comprised the CBT group.

Read the article...<http://dx.doi.org/10.1002/cpp.690>

Cockram, D. M., Drummond, P. D., & Lee, C. W. (2010). Role and treatment of early maladaptive schemas in Vietnam veterans with PTSD. *Clinical Psychology and Psychotherapy*, 17, 165-182. PILOTS ID: 34293.

Research on behavioral experiments may help answer whether challenging thoughts is necessary in CBT

Reviews comparing CBT treatments with behavioral treatments for anxiety disorders have found little evidence that the addition of cognitive techniques improved outcome beyond that of exposure. These studies looked at treatments involving a variety of cognitive and behavioral techniques that were not always treated as separate interventions. A new review is the first to evaluate the value of framing exposure as a cognitive strategy relative to exposure as a behavioral technique. The authors identified 14 studies that compared *in vivo* exposure with a behavioral experiment for the treatment of anxiety. A behavioral experiment is a cognitive strategy in which a thought is tested through a real-life exposure experience. This differs from other cognitive techniques, such as thought diaries and Socratic questioning, in that it experientially activates emotions. Behavioral experiments may produce their effects because they are functionally similar to exposure but explicitly framed as testing a cognition. The authors found partial support for the idea that conducting exposure as a cognitive test may be more effective than exposure in which this does not occur. They caution that definitive implications cannot be drawn due to mixed results across and within studies. They also note that a reduction in anxiety did not determine treatment termination for most exposure conditions in the review, which may have given behavioral experiments an edge; based on the habituation model, exposure is maximally effective when fear activation occurs by habituation of that response. The authors suggest that clinicians should not abandon integrated cognitive behavioral treatment for anxiety.

Read the article...<http://dx.doi.org/10.1016/j.cpr.2010.01.003>

McMillan, D., & Lee, R. (2010). A systematic review of behavioral experiments vs. exposure alone in the treatment of anxiety disorders: A case of exposure while wearing the emperor's new clothes? *Clinical Psychology Review*, 30, 467-478. PILOTS ID: 34415.

Skeptics of mindfulness surprised by effects for anxiety and depression

Even as mindfulness techniques have increasingly found their way into contemporary psychotherapies, whether it works is still in question. Qualitative reviews have concluded that mindfulness-based therapies (MBTs) are effective, but two quantitative meta-analyses came to divergent conclusions. A new review aimed to clarify whether MBTs are effective for improving anxiety and mood symptoms. The review included 39 studies employing Mindfulness-Based Cognitive Therapy (MBCT), Mindfulness-Based Stress Reduction (MBSR), or interventions modeled after either. The authors omitted studies of Acceptance and Commitment Therapy (ACT), asserting that mindfulness is a relatively small aspect of ACT and citing two recent existing meta-analyses of ACT. The authors, openly critical of MBTs, were surprised to find that pre-post effect size

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estimates for both depression and anxiety outcomes were in the large range for MBCT and in the moderate range for MBSR. Improvements were seen across a wide range of symptom severity, and when anxiety or depression was associated with medical problems rather than psychological disorders. Effects were maintained at follow-up. Although the findings support the efficacy of MBTs, the authors highlighted the small number of randomized controlled trials in the MBT literature as a limitation. Another limitation is that results may not generalize to ACT. However, researchers and clinicians who do conceptualize the majority of ACT processes as aspects of mindfulness may see the review results as validation of initiatives such as the VA national rollout of ACT for depression. Read the article...<http://dx.doi.org/10.1037/a0018555>

Hofmann, S. G., Sawyer, A. T., Witt, A. A., & Oh, D. (2010). The effect of mindfulness-based therapy on anxiety and depression: A meta-analytic review. *Journal of Consulting and Clinical Psychology*, 78, 169-183. PILOTS ID: 34303.

OEF/OIF Veterans

OEF/OIF Veterans who intend to seek treatment believe it will help symptoms but hurt career

Given the prevalence of mental health problems in OEF/OIF Veterans, there is a need to understand why so many fail to seek treatment. A recent study of an Army National Guard unit indicates that beliefs about mental health treatment are important determinants of the intention to engage in treatment as well as treatment attendance. In the study, 62% of the Veterans screened positive for major depressive disorder, panic disorder, generalized anxiety disorder, PTSD, or alcohol abuse, a rate higher than in other studies of this population. Among Veterans who screened positive for a mental disorder, those who intended to seek care were more likely than those who did not intend to seek care to think that treatment would reduce distress. However, the Veterans who intended to seek care also were more likely to believe that going to treatment would be detrimental to their job and that they would have difficulty talking about some of their war experiences. At a 3-month follow-up contact, 35% of the sample reported using treatment within one year after returning from deployment. Reports of the intention to seek treatment predicted treatment

attendance. Logistic factors, such as insurance status, travel distance, and transportation availability, did not predict either intention or attendance. The findings suggest that military policies addressing career consequences of treatment and interventions targeting treatment beliefs, such as cognitive therapy or motivational interviewing, may help in increasing treatment engagement. Read the article...<http://ow.ly/23an5>

Stecker, T., Fortney, J., Hamilton, F., Sherbourne, C. D., & Ajzen, I. (2010). Engagement in mental health treatment among veterans returning from Iraq. *Patient Preference and Adherence*, 4, 45-49. PILOTS ID: 34416.

Comorbidity

PTSD and risk of dementia in older Veterans

Evidence about the greater risk of health problems associated with PTSD continues to accumulate. Now a new study by investigators at the San Francisco VA Medical Center of over 180,000 VA patients reports that PTSD is associated with an increased risk of developing dementia. The investigators used the National VA Patient care database to extract information on Veterans age 55 and older who had been treated as a VA facility between fiscal years 1997-2000 and then had at least one additional visit during a follow-up period between fiscal years 2001-2007. Most (96.5%) were men. None of the Veterans had been diagnosed with dementia before 2001; 53,155 had been diagnosed with PTSD. During the follow-up, 10.6% of the Veterans with PTSD received a diagnosis of dementia, in contrast with only 6.6% of the Veterans without PTSD. Even after adjusting the data for the effects of demographic characteristics and other comorbid physical and psychiatric disorders, the investigators found that PTSD was associated with a 1.8 greater rate of onset. The investigators discuss several explanations for their findings, including the neurobiological effects of chronic stress, but note that their study cannot provide information about the mechanism. If PTSD somehow enhances the onset of dementia, an obvious implication is that it is important to try to treat PTSD and reverse its effects as soon as possible. Read this article...<http://archpsyc.ama-assn.org/cgi/reprint/67/6/608>

Yaffe, K., Vittinghoff, E., Lindquist, K., Barnes, D., Covinsky, K. E., Neylan, T., Kluse, M., & Marmar, C. (2010). Posttraumatic stress disorder and risk of dementia among US veterans. *Archives of General Psychiatry*, 67, 608-613. PILOTS ID: 34417.

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